

PATENT CLAIMS

1. (currently amended) A method for recovery of metals, in particular copper, from copper-bearing raw material that contains iron and sulphur, where said raw material is leached into an aqueous solution of copper chloride and hydrochloric acid, whereby iron and sulphur remain in a deposit formed in leaching, the method comprising:
characterized in that

adjusting a [[the]] redox potential of [[the]] a copper-containing raw material leach in a leaching stage, is adjusted using a feed of an oxydating agent to the range of 480 – 500 mV with regard to an Ag/AgCl electrode, whereby copper and other valuable metals in the copper chloride solution coming from leaching are mainly divalent[[,]];:

feeding the cupric chloride solution is fed to a liquid-liquid extraction[[,]]stage;

separating with which copper is separated from the cupric chloride solution in the liquid-liquid extraction stage; and is transferred in stripping

transferring the copper to a stripping stage having an aqueous solution of sulphuric acid[[,]]; and

feeding the copper in the aqueous solution of sulphuric acid which is fed to an electrowinning stage for recovery of elemental copper.

2. (currently amended) A method according to claim 1, characterized in that wherein the oxydating agent is oxygen.

3. (currently amended) A method according to claim 1, characterized in that wherein the oxydating agent is air.

4. (currently amended) A method according to ~~any of the above claims,~~
~~characterized in that claim 1, wherein the liquid-liquid extraction of the cupric chloride~~
solution is performed in two extraction stages.

5. (currently amended) A method according to claim 4, ~~characterized in~~
~~that wherein~~ a part of the aqueous solution coming from [[the]] ~~a~~ first extraction stage is fed
back to the leaching of the copper-bearing raw material.

6. (currently amended) A method according to claim 4 or 5,
~~characterized in that further comprising neutralizing, a [[the]] part of the aqueous solution fed~~
to [[the]] ~~a~~ second extraction stage is neutralized before being fed feeding to said second
extraction stage.

7. (currently amended) A method in according to ~~any of claims 4-6,~~
~~characterized in that claim 4, wherein~~ the extraction stages operate in parallel connection in
relation to [[the]] a flow of organic solution.

8. (currently amended) A method according to ~~any of the above claims,~~
~~characterized in that claim 1, wherein [[the]] extraction occurs at temperature~~ is a maximum
temperature of 40°C.

9. (currently amended) A method according to ~~any the above claims,~~
~~characterized in that claim 1, wherein an [[the]] aqueous solution of sulphuric acid fed to the~~
stripping stage is a return acid from the copper electrowinning stage.

10. (currently amended) A method according to ~~any of the above claims,~~
~~characterized in that claim 1, further comprising precipitating [[the]] other valuable metals~~
[[in]] of the copper-containing raw material such as nickel, cobalt and zinc are precipitated
from the aqueous solution after extraction using alkali hydroxide precipitation.

11. (currently amended) A method according to ~~any of the above claims,~~
~~characterized in that claim 1, wherein~~ the copper-bearing raw material contains precious metals such as gold and/or platinum group metals (PGM).

12. (currently amended) A method according to claim 11, ~~characterized in that further comprising precipitating gold and/or platinum group metals (PGM) are made to precipitate in connection with raw material leaching in precipitation of sulphur and iron, the gold and/or platinum group metals being precipitation and are recovered from [[the]] a precipitate deposit during a sulphur flotation stage.~~

13. (currently amended) A method according to ~~any of the above claims,~~
~~characterized in that claim 11, wherein a [[the]] pH value in the copper-bearing raw material leaching is at least 1.5.~~

---14. (new) A method according to claim 10, wherein the other valuable metals are selected from the group consisting essentially of nickel, cobalt and zinc.---